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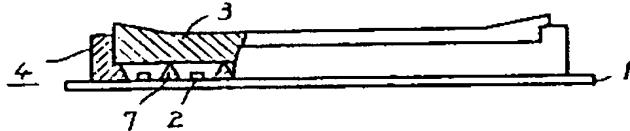
APPLICATION DATE : 04-09-86  
APPLICATION NUMBER : 61206845

APPLICANT : TOSHIBA CORP;

INVENTOR : TANAKA TOSHIAKI;

INT.CL. : H01L 33/00 G02B 3/06

TITLE : LED ARRAY



ABSTRACT : PURPOSE: To spread an effective radiation region without lengthening the overall length of an LED array by forming an inclined section, thickness of which is decreased from an end section, to a bar-shaped lens oppositely faced to LED pellets aligned and arranged onto the surface of a wiring substrate.

CONSTITUTION: Wirings required for connecting a circuit are shaped onto the surface of a wiring substrate 1 made of a resin by a metallic layer such as a Cu layer, and a plurality of LED pellets 2 are fixed to necessary sections. A bar-shaped lens 3 made of an acrylic resin is disposed and fastened along the substrate 1 by an extrusion-molded part 4 made of a polycarbonate resin, faced oppositely to the pellets 2. The part 4 is reinforced by bridge sections 7 connecting a wall section and a bottom section together with the wall section along the longitudinal direction of the substrate 1 and support sections blocking both ends. An inclined section, thickness of which reduce gradually over the sections in the vicinity of both ends therefrom, is formed to the lens 3, and the lens 3 changes the refracting rate of emitted light from the LEDs.

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